Federal debt: allocate premia on accruals basis in budgetary interest expenditure

In recent years, the Federal Government's interest expenditure has fallen sharply. This was largely due to the lower interest rate level. However, another factor was that interest expenditure is not recorded on an accruals basis in the Federal budget. This primarily concerns premia on new securities at the time of issue.

Premia accrue when a security's coupon is higher than the market interest rate. This premium on the redemption price is paid when the security is purchased. The greater the difference between the coupon and market rate, and the longer the interest rate lock-in period of the security, the higher the premium becomes.

These premia are recorded in the Federal budget immediately and in full as negative interest expenditure, and only the coupon payments are subsequently recorded over the remaining term. As a result, interest expenditure is not spread evenly (on an accruals basis) over the term. Using this accounting practice, premia ease the pressure on debt brake limits in the short term, at the expense of future budgets. Interest expenditure and hence budget outturns become both more volatile and more difficult to rank.

The volume of premia received in the Federal budget has risen sharply in recent years. In the decade up to 2010, they averaged €½ billion; in the last decade they came to €4 billion. A peak of almost €12 billion was reached in 2020, equating to 2½% of total expenditure in the Federal budget. The premia received thus reduced reported interest expenditure by just under two-thirds.

Switching to recording interest expenditure on an accruals basis in future would be more appropriate from an economic perspective, and would have a number of other advantages. It should be possible to make the switch without any major difficulties. This would make it easier to identify the actual budgetary situation. The interest burden on budgets would be stabilised, while budget outturns could be better planned as well as becoming less erratic. The switch would also be more in keeping with the intention of the debt brake, doing away with one possibility of circumventing it. Lastly, changing the way in which premia are recorded would also better ensure compliance with the European rules.

How premia arise when issuing securities

Federal securities traditionally pay fixed coupon

The Federal Government can close funding gaps in its budget by issuing debt, for which upper limits are set by the fiscal rules. At the end of 2020, the debt level in the Federal Government's core budget (as defined by the Stability Council) came to €1,163 billion, or 35% of gross domestic product. The vast majority of this Federal debt is attributable to securities issued in the capital market. These securities have to pay interest commensurate with market conditions at the time of issue. Amounts falling due annually are usually paid in the form of fixed coupons.[1] For Treasury discount paper with maturities of up to one year (Bubills), interest is paid as the difference between the issue price and par value.[2] For inflation-linked securities, such payment is made in addition to the coupons by adjusting the redemption amount to the price index performance. In the case of conventional securities (with a coupon), too, portions of the interest can be paid as differences between the issue price and par value. If a newly issued instrument's coupon is higher than the market rate, the issue price exceeds the par value, producing a premium. The greater the difference between the coupon and market rate, and the longer the interest rate lock-in period of the security, the higher the premium becomes.[3]

Bond series with several taps one factor behind premia …

The Federal Government generally aims to issue a relatively high volume of its individual series of securities. This increases the liquidity of the instruments and thus reduces the liquidity-related interest surcharge as part of the total financing costs. In order to reach the target volumes, the individual series are normally issued (brought onto the market) in multiple tranches. In other words, the initial issue of a series is subsequently topped up by sales of additional taps.[4] While the coupon for the initial issue is generally geared to the prevailing capital market rate, it can deviate more strongly from this in subsequent taps. If the capital market rate has fallen in the meantime, the issue price that the Federal Government charges when selling securities rises.

… of sizeable amounts in some cases

A long interest rate lock-in period can easily result in a sizeable premium. In 2014, for example, a 30-year Federal bond (Bund) was launched with a coupon of 2.5%, in line with market conditions. At the time of the last tap in the summer of 2019, its market yield was just ¼%. This resulted in an extremely large premium of 60% of par value.

Negative interest rates also produce significant premia for long-dated bonds

There have been considerable premia in recent years. Given the above-described issue strategy pursued by the Federal Government, this is because yields on Federal securities have declined sharply overall since the financial and economic crisis of 2008-09. For some time now, negative yields have even been recorded – extending into the 30-year maturity band at the lowest point. When interest rates are negative, significant premia occur right from initial issuance, because coupons do not have a negative interest rate. This has also affected the most important instrument, the ten-year Bund, with one series even generating a premium of just over 5% of par value. In addition, given the favourable conditions, the Federal Government has issued long-dated securities on a particularly large scale. The premia on these were especially high. On balance, the total premia received by the Federal Government have risen strongly in the past few years. In 2020, they doubled to nearly €12 billion on the back of very extensive issuance related to the COVID-19 crisis.

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1 The coupon securitises the claim to payment of interest and states the nominal interest rate of a security. This deviates from the constantly changing general market rate. The market rate (also known as the effective interest rate or yield) takes into account the nominal interest rate as well as the difference between the market price and redemption value, spread over the term of the security.
2 A security's par value is the amount that the issuer has to pay to the purchaser at maturity (redemption value).
3 If the coupon is lower than the market rate, there is a discount. The following remarks would then apply with the sign reversed.
4 The Federal Government also sells securities from its own holdings over time. It holds these back from issues, not least to enable it to intervene to smooth price swings (market smoothing).

Advantages of accrual accounting for premia in the Federal budget[5]

Record interest from premia over term

In the Federal budget, coupon payments are recognised in the year they fall due, which means that they are spread evenly over the term of the securities.[6] For premia, on the other hand, the current practice is to record them in full as negative interest expenditure (affecting the budget balance) in the year the securities are sold. This means that they reduce interest expenditure only in the year of sale. From an economic perspective, however, the time at which interest burdens are recorded should not depend on whether they take the form of coupons or premia. It was on the basis of this guiding principle that the Federal Government set up a special fund as provision for additional payments when redeeming inflation-linked debt instruments. Each year, the Federal budget transfers the additional accrued obligations for inflation adjustment to this special fund. Hence, this type of interest burden is recorded on an accruals basis. The following sections will initially outline how premia, too, can be recorded on an accruals basis in the Federal budget in future – similarly to what the basic rules of the national accounts intend.

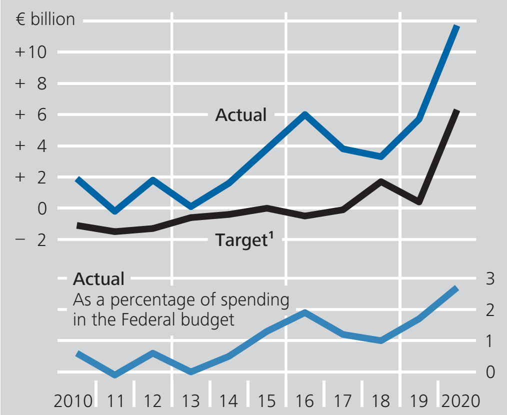
Technical implementation of accrual accounting

Technically speaking, the premium would be recorded as borrowing at the time the security is sold. Thus, the borrowing would consist of the par value plus the premium (to be amortised over time). Compared with the current situation, then, higher borrowing (and equally no negative impact on interest expenditure) would initially be reported. Part of the future coupon payments would then no longer constitute interest expenditure, but rather repayments of this additional borrowing (the amount above the market rate at the time the security is sold).[7] This would mean that interest payments are recorded evenly year by year, both in the budget and for the debt brake.[8]

There would be significant advantages to taking this more economically appropriate approach to recording premia (and discounts) in the Federal budget. First, it would be more in keeping with the objective of the debt brake. The rule is intended to limit borrowing and hence implicit legacy burdens on future budgets. If premia are deducted from interest expenditure in the year of issue, as has so far been the case, the objective of the debt brake is in effect undermined: the premia provide relief in the short term, whereas future budgets are saddled with greater burdens from higher interest expenditure than implied by the market rate when the security was issued. What this essentially does is ease the pressure on the debt brake in the short term, without the sub-

Advantages: recognition as borrowing reduces legacy burden on future budgets and enhances transparency

Premia in the Federal budget

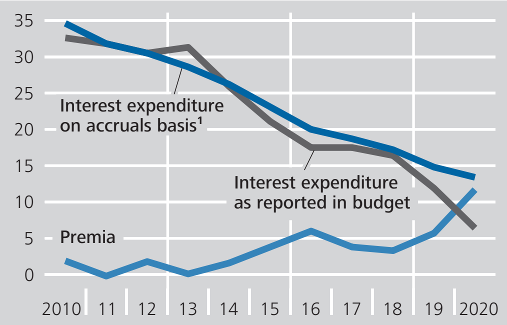


Source: Federal Ministry of Finance. **1** Taking into account supplementary budgets.
Deutsche Bundesbank

5 See also Deutsche Bundesbank (2017).
6 The first coupon sometimes covers a somewhat longer period, since interest can begin accruing more than one year before the coupon date. If the instruments are sold after interest begins accruing or after a coupon date, accrued interest has to be paid upon acquisition. This is repaid by the Federal Government on the next coupon date.
7 A smaller portion of the deviation between the coupon and market rate obviously reflects interest on the premium in line with market conditions.
8 Compared with the current accounting practice, premia recorded as borrowing are offset by additional interest expenditure. The immediate relief that premia have previously provided for the debt brake is thus eliminated. It is spread over the entire term: to do so, the repayment component (for additional borrowing, in the amount of the premium) is deducted from the coupon payments. As a result, this does not represent a burden on the budget under the debt brake. Thus, the yield required by the capital market at the time of issue is accounted for throughout, instead of recording the full relief provided by premia at the time of issue.

Interest expenditure and premia in the Federal budget

€ billion



Sources: Federal Ministry of Finance and Bundesbank estimates. **1** Up to 2019, approximated according to Federal Ministry of Finance's 2019 borrowing report; 2020 figure estimated. Besides premia, other components of interest expenditure (incl. accrued interest) are allocated on an accruals basis.

Deutsche Bundesbank

sequent burdens that this brings with it being disclosed. Ultimately, this could even create a political incentive to issue securities with large coupons in order to use the premia on these as a way of building up extra budgetary scope.[9] In the case of premia, if the switch were made to accrual accounting, this scope would be smaller than before in the year of issue and greater in subsequent years. By reporting interest on an accruals basis, it would then be possible, not least, to see the basic position of the Federal budget more transparently. It would not be obscured by any large premia.

Current accounting makes Federal budget unnecessarily volatile

Second, interest expenditure would be less volatile and could be planned fairly reliably. Between 2010 and 2020, premia fluctuated significantly from one year to the next, ranging from a marginal discount in 2011 to premia of almost €12 billion in 2020. The premia received thus reduced reported interest expenditure by just under two-thirds last year (see the above chart). Overall, outturns often deviated considerably from budget estimates – even though some of these had even been updated in supplementary budgets. At their peak, the deviations exceeded 1½% of total expenditure in the Federal budget, making them quite significant indeed. If premia included in the budget plans do not materialise, this can even result in the debt brake limits being breached. In the 2021 supplementary budget, one of the factors to trigger the increased borrowing requirement was lower premia. The relief provided by premia is set to be €3½ billion lower, because capital market rates are now higher. From this perspective, too, it is therefore advisable to record interest burdens in the Federal budget on an accruals basis and thus eliminate the volatility of premia.

Switch in accounting practice would better ensure compliance with European requirements

Third, the debt brake is designed to ensure compliance with the European fiscal rules. The standardised national accounts are applicable to them. The rules governing national accounts essentially follow the economic perspective and stipulate that premia occurring when issuing securities be recorded over the life of the security as providing relief.

Swift implementation via control account possible and facilitated by activated escape clause

If the budget accounts are already closed, the accounting method cannot be changed retroactively. However, to depict the economic relationship described here for past years as well, the Federal Government's existing debt brake control account can be considered: it records positive and negative deviations of budget outturns from the standard limits.[10] In the years prior to the coronavirus crisis, the high premia, which were not being recorded on an accruals basis, increased the credit balances on this account. If the switch in accounting practice were made, as described here, those earlier premia would be allocated to future budgets on an accruals basis with an alleviating effect (reducing interest expenditure). In turn, the balance on the control account would need to be reduced

9 In its 2020 remarks, the Federal Court of Auditors points out that the impression of opportunity for misuse could arise (p. 21). The reasons why premia were so much higher in the decade following the introduction of the debt brake than in the decade before cannot be determined with certainty. Ultimately, however, declining and negative interest rates are likely to have been a crucial factor in this. The creation of additional budgetary scope, on the other hand, does not appear to have played a decisive role over this period.
10 Where these deviations resulted in surpluses in the core budget, they were transferred to the reserves held separately from the control account. Due to the surpluses of 2015 to 2019, these reserves currently amount to €48 billion.

by the associated premia (not recorded on an accruals basis originally). This would see it shrink from €52 billion now to a little over €30 billion.[11] If the switch were made, interest expenditure would, on the one hand, be roughly €3 billion lower in the current year, given that the past premia would now be allocated such that they reduce interest. On the other hand, this year's premia would largely be allocated to subsequent years. This would make interest expenditure for 2021 around €4 billion higher than the budget estimate. On balance, the switch would create a burden of roughly €1 billion in the current budget plan.[12]

At least transparent auxiliary calculation advisable

In the event that there is no change to the budget accounting method, it would at least be advisable to include a transparent auxiliary calculation in the budget plan and budget account.[13] This should depict the effects premia would have if the relief were recorded over the entire term on an accruals basis. In doing so, premia from previous years should be presented as well as those from the relevant budget. Overall, the auxiliary calculation should represent the structural burden of interest expenditure on the budget in a way that is easily understood.[14]

Accrual accounting for interest would be advantageous and easy to implement

All things considered, there is much to be said for switching the accounting method for interest expenditure, particularly in the Federal budget. The current accounting approach entails quite a number of problems. Recording interest expenditure on an accruals basis would be more appropriate from an economic perspective; it would make it easier to assess the actual budgetary situation, and it should be possible to implement the reform without any major difficulties. The interest burden on budgets would be stabilised, while budget outturns could be better planned and would become less erratic. The switch would also be more in keeping with the intention of the debt brake, doing away with one possibility of circumventing it. Lastly, changing the way in which premia are recorded would also better ensure compliance with the European rules.

11 The estimated effects for 2020 are included for the sake of simplicity, rather than adjusting the outstanding repayment from the escape clause. For previous years, data from the Federal Ministry of Finance's 2019 borrowing report were used. Premia from before 2016 do not lower the balance on the control account, since the high legacy balance was already cancelled in full.
12 Since the escape clause is currently activated, additional burdens would result in the standard limits being exceeded by a greater margin. This would have to be compensated for in repayment plans for the future. In this specific arrangement, however, the higher overall repayment obligations would be counteracted by almost matching lower interest expenditure paid on premia.
13 The Federal Court of Auditors also proposes this kind of auxiliary calculation. See Federal Court of Auditors (2020), p. 22.
14 Up to now, the Federal Ministry of Finance has made such disclosures for Federal debt, including the off-budget entities financed by the Finance Agency, only in its borrowing reports. This means that this information is not available until the third quarter of the following year. See Federal Ministry of Finance (2020), p. 15.

List of references

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